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Certification requirements for teachers and administrators.

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CERTIFICATION REQUIREMENTS
FOR TEACHERS AND ADMINISTRATORS



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CERTIFICATION REQUIREMENTS

FOR

TEACHERS AND ADMINISTRATORS

BY

ARTHUR ELLIS SULLIVAN

**A problem submitted in partial fulfillment
of the requirements for the Master of
Science Degree**

University of Massachusetts

1948

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CHAPTER I

THE INTRODUCTION

CHAPTER I

THE INTRODUCTION

"A teacher's certificate is an instrument that gives a person a legal authority to teach. It is usually granted by some governmental agency upon the basis of college credentials, teaching experience, or examination, and is valid in one or more types of public school teaching positions."¹

Teacher certification serves several related purposes: It protects the state against waste in the expenditure of public school funds, it protects pupils against ill-prepared teachers, it protects qualified teachers against the unfair competition of those not qualified, and, properly administered, it may be made, within limits, to advance the competency and improve the qualifications of teachers in service. Summarized into one primary purpose, certification seeks to protect the public against incompetent teachers.

(1) A Brief History of Teacher Certification -- Teacher certification, in its rudimentary forms, has been in evidence in the United States as long as formal education itself. In the earlier Colonial days, certification to teach in the church dominated schools was administered by the ecclesiastical authorities. Existing records, dating back to about 1690, indicate that it was necessary that the Grammar School masters secure the approval of the "minister of the town and of the two next adjacent towns."² It meant that the most important

(1) Frazier, B. W., Development of State Programs for the Certification of Teachers. Chapter I.

(2) Ibid. p. 15.

qualification for teaching was religious orthodoxy.³

The aftermath of the American Revolution brought about certain changes in the pattern of life in the Colonies that were characterized by a divorce of church and state, and a popular movement in the direction of political democracy. The educational counterpart of the movement, described by Eby and Arrowood⁴ as "The Revolution in American Education" was marked by the secularization of public education and the reformulation of the American educational ideal in harmony with democratic principles.

Authority for determining teacher qualifications passed from the church officials through a transition stage during which both church and local officials passed judgement, and subsequently, to the exclusive control of the local political governments. Later administrative plans effected a breakdown of the towns and counties into educational units, "so small and often so isolated that they quite lacked broad educational ideals even if they had had the resolution to insist upon them."⁵

Although the requirements for teacher qualification showed considerable variation among the various communities, and were sometimes

(3) Butts, R. Freeman, A Cultural History of Education, pp. 297 - 298.

(4) Eby & Arrowood, The Development of Modern Education, pp. 710 - 712.

(5) Brubacher, A History of the Problems of Education, pp. 520 - 521.

questionable as to their teaching value, the interest of the American public in having its teachers certified is considerably older than its interest in taking a responsibility for having them trained. "The Changing Educational World"⁶ cites an example of the low standards during the eighteenth century in the case of the peddler who could neither read nor write, but by practicing the duplication of a specimen of handwriting one hundred times, succeeded in passing a teacher examination which consisted of writing the Lord's Prayer. Massachusetts is said to have had the first State certification law in 1781.⁷ However, the first State Normal School in the country did not appear until 1839, in Lexington, Massachusetts.

Because of the weak and inadequately staffed State departments of education, such as existed, and because of the difficulties of communication, authority for certification remained in local hands for many years. With the rapid advancement of public education during the early decades of the nineteenth century, larger school administrative units - county, township, and city - were developed as intermediate units between the small local districts and the State departments of Education. With the strengthening of the State departments, and their increasing participation in school administration, educa-

(6) Hurich, Alvin C. (Editor), The Changing Educational World, p. 194.

(7) Frazier, B. W., op. cit., p. 17.

tional control gradually moved toward state centralization. This movement was especially marked during the last half of the nineteenth century. As the control of education became increasingly centralized into larger units, it was accompanied by the power to certify teachers.

The first state to effect complete centralization was New York, in 1894.⁸ Before the turn of the century, three more states had followed New York's example. By 1937, forty-one states had established centralized control of education, and consequently, state control of the certification function.⁹

(2) Trends in Certification -- Although at the present day no uniformity exists in the various states concerning certification policies, a few central trends have appeared within the past fifty years:¹⁰

(a) The centralization of the certification function in the state departments of education.

(b) The substitution of approved training for teachers' examinations.

(c) The differentiation of certificates according to the student's preparation.

(d) The gradual abolition of life certificates.

(e) The raising of training levels for all types of teaching certificates.

(8) Englehardt & Overn, Secondary Education, p. 553

(9) Frazier, E. W., op. cit., p. 29.

(10) Elsbree, Willard S., The American Teacher, pp. 337 - 354.

(f) The requirement of a certain number of specialized courses in Education in the candidate's program of studies.

One noticeable trend is toward closing the gap between the required standards for Elementary Teachers and for Secondary Teachers. More progress has been made toward three and four year standards for Elementary Teachers than toward five year standards for Secondary Teachers.¹¹

Although the trend is toward state specification of minimum standards for certification, this does not preclude the various school systems within the state from setting higher standards for qualification to teach within their particular systems. As a general rule, the larger the city, the more rigid are the requirements specified.¹²

(3) Current Criticisms of Certification Practices -- The most serious criticism launched against the state certification programs is the failure to work out reciprocity relationships between the states. Barriers restricting the movement of qualified teachers from one state to another include:¹³

(a) Requirements such as a course in School Law of the state, and the State Constitution, or State History.

(b) Specific requirement of Practice Teaching regardless

(11) Knudsen and Hoifce, An Introduction to Teaching, pp. 255-258.

(12) Ibid., pp. 260-262.

(13) Elsbree, Willard S., op. cit., pp. 357-358.

of the number of years of successful teaching experience in some other state.

(a) Rigid requirements pertaining to the number of clock hours of training in a designated course.

(3) Requirement of courses by a specific title, and the refusal to recognize any variation of the title even though the course content may be identical or closely related.

CHAPTER II

STATEMENT OF THE PROBLEM AND OUTLINE OF PROCEDURE

CHAPTER II

STATEMENT OF THE PROBLEM AND OUTLINE OF PROCEDURE

(1) Statement of the Problem -- The problem is to determine the average, exceptional, and unusual requirements for certification of public school teachers and administrators in the several states of this country.

The purpose of this study is two-fold:

(a) To provide a practical reference for prospective public school teachers and administrators to guide their selection of courses of study.

(b) To provide a reference to enable a comparison of attained qualifications with required standards.

(2) Materials -- The basic authority used for this study was the listings by individual state, as prepared by Woellner and Wood¹, of the specific academic and professional requirements for the certification of public school teachers and administrators.

(3) General Procedure -- A master chart was prepared for each of the five categories considered: Elementary, Junior High, Secondary, Junior College, and Administration. Each category will be considered in a separate chapter.

Each chart was compiled by listing the states vertically and inserting the specific requirements of each horizontally, with like items in the same vertical column.

(1) Woellner and Wood, Requirements for Certification of Teachers and Administrators.

The individual requirements were classified as General Academic, Specific Academic, General Professional, or Specific Professional. This classification forms the general pattern for the organization of each chapter.

The data was then compiled from the vertical columns of the charts and tabulated to show the range, in decreasing numerical order, of credits required by the various states for each individual item. The number and names of the states requiring each specified number of credits are indicated and any central tendencies in requirements are pointed out. Exceptional, unusual, and unique requirements are considered as miscellaneous items under the appropriate general heading.

(4) Nature and Form of the Report —

Because of the nature of this study, the report is necessarily tabular in character. Any attempt to organize the findings in essay form would serve to confuse more than clarify. Special tables deemed necessary to further analyze certain aspects of the requirements are included.

All numerical figures designating credit requirements are understood to mean semester hours unless otherwise specified. The symbol "X" which will be found frequently throughout the report is meant to indicate that the item is required but the amount of credit is not specified.

In subjects such as Administration, Supervision, Curriculum, etc., for which the application may vary according to the different school levels, the symbols (E), (S), and (E&S) are used when specific reference is made to the Elementary level, Secondary level, or both levels,

respectively.

Since the magnitude of the problem prohibits any attempt to consider local requirements, this study is confined to certification requirements as indicated by the various state governments.

CHAPTER III

CERTIFICATION REQUIREMENTS FOR ELEMENTARY TEACHERS

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CERTIFICATION REQUIREMENTS FOR ELEMENTARY TEACHERS

(1) General Academic Requirements -- The general academic requirements refer to the amount of, or evidence of preparation, and are summarized as follows:

<u>Preparation Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
Bachelor's Degree or 4 years of college	18	Arizona, California, Connecticut, Delaware, District of Columbia, Florida, Indiana, Louisiana, Maryland, Michigan, New York, North Carolina, Pennsylvania, Rhode Island, Virginia, Washington, West Virginia, Utah.
3 Years of College	6	Alabama, New Hampshire, New Jersey, Ohio, Oregon, Wisconsin.
90 Semester Hours	1	Colorado.
76 Semester Hours	1	Oklahoma.
2 Years of College or 2 Year Normal School Diploma	9	Idaho (1 term in residence). Iowa (4 years required for advanced certificate). Maine (3 years required for professional certificate). Minnesota, Nebraska (only 1 year for rural school). Nevada, South Dakota, Vermont, Wyoming.
Junior College Graduate	1	Illinois.
64 Semester Hours	2	Kentucky (College graduation required for standard certificate) North Dakota.
60 Semester Hours	3	Georgia, Missouri, New Mexico (120 Semester hours for Master certificate).
60 - 72 Semester Hours	1	Tennessee

30 Semester Hours	3	Arkansas, Kansas, South Carolina (60 Semester hours for 1st grade certificate).
Diploma from State Normal School	1	Montana.
High School graduate plus 6 weeks of Normal School training	1	Mississippi (Minimum legal requirements, but not the practice).
5 Full Courses	1	Texas.
No Requirements	1	Massachusetts.

It is noted from the above summary that every state, except Massachusetts, requires some general academic preparation of Elementary teachers. More than half of the states require three years or more of college preparation. Eighteen of this number specify a Bachelor's degree or its equivalent.

(2) Specific Academic Requirements For Elementary Teachers --

This section refers to specific subject preparation required of Elementary Teachers. In the following summaries, each subject is analyzed individually according to the requirements of the various states:

(a) English:

Credits Required	Number of States Requiring	Specific States
24	1	Indiana.
18	1	Alabama.
15	2	Kentucky (12 for provisional certificate). West Virginia.
12	3	New Mexico (10 for professional certificate).

12	3	North Carolina, Tennessee.
10	2	Washington, Utah.
7	1	Iowa.
6	5	Arkansas, Florida, Illinois, Oklahoma, Wyoming.
5	1	Missouri.
3	2	Delaware, Kansas.
X	4	District of Columbia, Georgia, Texas, Virginia.
None	26	

From the above summary it is to be noted that 22 states and the District of Columbia require English credits ranging from 3 to 24 semester hours, with the greatest frequency occurring at 6 semester hours.

Fifteen of the above listed states require a specific breakdown of English credits. This is shown in the Table I on the next page.

TABLE I

Analysis of English Requirements for Elementary Teachers in the
States Requiring a Specific Breakdown of Credits.

State	Total Require- ments	Child Liter- ature	Reading	Speech	Compo- sition	Drama	Liter- ature
Alabama	18		2				
Arkansas	6	X					
Delaware	3		3				
District of Columbia	X	X	X				
Georgia	X	X					
Indiana	24	4		4	4	4	
Iowa	7	2	3	2			
Kansas	3-5	2	3				
Kentucky	15	3	3		6		3
Missouri	5	2					
New Mexico	10				6		4
North Carolina	12	2			6		
Tennessee	12	2			6		4
Utah	10			3	6		
Washington	10	X			X		X

(b) Arithmetic:

Credits Required	Number of States Requiring	Specific States
6	1	Illinois (Option: 6 science credits).
4	2	Indiana, Oklahoma.
3	3	Delaware, Kentucky (2 for provisional certificate), and Iowa.
2	3	Missouri, New Mexico, Washington.
X	37	

From the preceding summary it is to be noted that 11 states and the District of Columbia require Arithmetic credits ranging from 2 to 6 semester hours, with the mean requirement of 3 semester hours.

(c) Sciences:

Credits Required	Number of States Requiring	Specific States
20 Quarter-Hours	1	Utah (10-Biological, 10-Physical)
13	1	West Virginia.
12	1	Kentucky (5 for provisional certificate).
10	1	Washington.
8	1	Indiana (4-Biological, 4-Physical)
6	6	Alabama, Florida, Illinois (option: 6-Arithmetic), Iowa (Biological only), New Mexico, Tennessee.
5	1	Missouri.
4	1	Oklahoma.
2-3	1	Arkansas.
X	3	District of Columbia, Georgia, Virginia.
None	31	

The above summary indicates that 17 states and the District of Columbia require Science credits ranging from 2 to 13 semester hours, with the greatest frequency occurring at 6 semester hours.

(d) Social Studies:

Credits Required	Number of States Requiring	Specific States
18	1	West Virginia.
15	1	Kentucky (6 for provisional certificate).
12	1	Indiana.
10	3	Missouri, Utah, Washington.
6	5	Arkansas, Florida, Illinois (option: 6-History), New Mexico, Wyoming.
4	1	Oklahoma.
3	2	Delaware, Kansas.
X	1	Virginia.
None	33	

Fifteen states require credits in Social Studies, ranging from 3 to 18 semester hours, with the greatest frequency occurring at 6 semester hours.

Five of the above listed states require a specific breakdown of Social Studies credits. This is shown in Table II.

TABLE II

Analysis of Social Studies Requirements for Elementary Teachers in the States Requiring a
Specific Breakdown of Credits.

State	Total Credits	Geography	Sociology	Political Science	Economics	History	Civics	Government
Arkansas	6	x						
Indiana	12		4	4		4		
Kentucky	15		3.....or.....	3		6....or....6		
Missouri	10	2				5		2
Washington	10					x		

(e) History:

Credits Required	Number of States Requiring	Specific States
12	1	Alabama.
6	5	Florida (including U. S. Constitution-option: examination on Constitution), Illinois (option: 6-Social Studies), Iowa (2 for advanced certificate), Kentucky, Tennessee.
5	1	Missouri.
4	1	Oklahoma (American History).
2-6	1	New York (including Philosophy of Education and Education Orientation).
X	2	District of Columbia, Washington.
None	37	

Eleven states and the District of Columbia require credits in History, or equivalent subjects, ranging from 2 to 12 semester hours, with the greatest frequency occurring at 6 semester hours.

(f) Geography:

Credits Required	Number of States Requiring	Specific States
8	2	Alabama, Indiana.
6	3	Kentucky (3 for provisional certificate), North Carolina (including Nature Study), Tennessee.
3 1/3	1	Washington.
3	2	Iowa (not required for advanced certificate), Kansas.

Geography (Contd)

Credits Required	Number of States Requiring	Specific States
2	1	Missouri.
X	3	Arkansas, District of Columbia, Georgia.
None	36	

Twelve states and the District of Columbia require credits in Geography, ranging from 2 to 8 semester hours, with the greatest frequency occurring at 6 semester hours.

(g) Music:

Credits Required	Number of States Requiring	Specific States
8	1	Indiana.
6	1	West Virginia.
4	3	Alabama, Kentucky (2 for provisional certificate), Tennessee.
3 1/3	1	Washington.
3	1	Iowa (not required for advanced certificate).
2	5	Missouri, New Mexico (option: 2-Arts) Oklahoma, South Dakota, Kansas.
2-3	1	Arkansas.
X	5	District of Columbia, Georgia, North Carolina, Pennsylvania, Virginia.
None	30	

Eighteen states and the District of Columbia require credits in Music, ranging from 2 to 8 semester hours, with the greatest frequency

occurring at 2 semester hours.

(h) Arts:

Credits Required	Number of States Requiring	Specific States
8	1	Indiana.
6	2	Missouri, West Virginia.
4	3	Alabama, Kentucky (2 for provisional certificate), Tennessee (including Practical Arts).
3 1/3	1	Washington.
3	1	Iowa (including Practical Arts).
2	4	Kansas, New Mexico (option: 2-Music), Oklahoma, South Dakota.
2-3	1	Arkansas.
X	5	District of Columbia, Georgia, North Carolina (9 credits distributed between Arts, Practical Arts, and Music), Pennsylvania, Virginia.
None	30	

Eighteen states and the District of Columbia require credits in Arts, or equivalent subjects, ranging from 2 to 8 semester hours, with the greatest frequency occurring at 2 semester hours.

(1) Practical Arts:

Credits Required	Number of States Requiring	Specific States
4	1	Indiana.
2	2	Kentucky (option: Agriculture, Rural Home and Social Problems, or Sociology). Washington (option: Home Eco- nomics).
X	4	Georgia (recommended), Iowa, North Carolina, Tennessee.
None	41	

Only seven states require or recommend credits in Practical Arts or equivalent subjects. The maximum requirement of any state is 4 semester hours, and four of the seven states indicate an unspecified number of credits.

(j) Health, Hygiene, Physical Education, and Safety:

Because most of the states requiring Health, Hygiene, Physical Education, or Safety specify their requirements in combinations in two or more items with definite allocation of specific credits not indicated, it is impossible to present a readily understandable summary. Instead, a breakdown according to states listed alphabetically is shown in Table III.

TABLE III

Allocation of Health, Hygiene, Physical Education, and Safety

Credits as Required by the Various States:

State	Total Credits	Health	Hygiene	Physical Education	Safety
Alabama	8	X		X	
Arkansas	2-3	X		X	X
District of Columbia			X	X	
Florida		1 semester		1 semester	
Georgia		X			
Indiana	24	X	4	12	X
Iowa		2		X	
Kansas		3			
Kentucky	4		X	X	X
Missouri		2.....or.....2		2 years	
Nebraska			2		
New Mexico		2			
North Carolina	6	2	2	2	
Oklahoma		2			
Pennsylvania		2			
Tennessee		6		2	
Utah		3 quarter hours		3 quarter hours	
Virginia			2		
Washington	4	X		X	
West Virginia				4	

It is to be noted in Table III that 19 states and the District of Columbia require some combination of Health, Hygiene, Physical Education, and Safety in total credits that range from 2 to 24, with the greatest concentration in Health and Physical Education.

(k) Miscellaneous Requirements - Some states specify requirements that are too varied or unique to adequately summarize. These are shown in Table IV.

Two unique requirements for Elementary Teachers not shown in Table IV are found in the states of Michigan and Washington. In academic training, the former requires 4 minors of 15 semester hours each, or 1 major and 2 minors of 24 and 15 hours, respectively. Washington requires $33\frac{1}{3}$ semester hours concentrated in 2 or 3 fields with a minimum of 10 semester hours in any one field.

TABLE IV

Miscellaneous Requirements for Elementary Teachers:

State	U.S. Consti- tution	State Govern- ment	State History	Other
California	2			
Florida	X*			
Georgia				X-Home Economics X-Agriculture
Indiana				4-Biology, 4-Practicum
Kansas				2-Playground Activities
Montana		X*	X*	X-State Courses of Study* - 9 weeks study in residence
Nevada	X	X*		
North Carolina				X-Proficiency in Pen- manship and Spelling
Oklahoma			2*	2-Agriculture*
Oregon			2 2/3	X-State Education System
South Dakota		(2,.....)		
Texas	X	X		
Utah				X-A major interest other than teaching
Washington	X	X	X	

(*) Indicates requirement may be satisfied by examination.

(3) General Professional Requirements For Elementary Teachers:

This section refers to the total Education credits required by the various states. These are summarized as follows:

<u>Education Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
40	1	District of Columbia.
36	1	New York.
33 quarter hours	1	Utah.
30	3	Kentucky (13 for provisional certificate), Pennsylvania, Vermont.
26	1	Iowa (17 for standard certificate).
24	3	Alabama, Arizona, California.
23 1/2	1	Washington.
21	1	North Carolina.
20	4	Colorado, Michigan, West Virginia, Wyoming.
18	5	Florida, Louisiana (12 if applicant holds Master's Degree), Nevada, Virginia, Georgia (15 for provisional certificate).
16	2	Illinois, North Dakota.
15	1	South Dakota.
12	2	Oklahoma, Tennessee.
10	2	Idaho, Missouri.
6	1	Maine.
6-9	1	Arkansas.
200 clock hours	1	Rhode Island.
None	18	

It is to be noted that 30 states and the District of Columbia require credits in Education ranging from 6 to 40 semester hours, with the greatest frequency occurring at 18 semester hours.

(4) Specific Professional Requirements For Elementary Teachers:

This section refers to the specific subjects of professional preparation required of Elementary Teachers. The requirements of the various states are analyzed individually by subjects in the following summaries:

(a) Educational Psychology:

Credits Required	Number of States Requiring	Specific States
4	2	Alabama, Indiana.
3 1/3	1	Washington (option: Child Psychology)
3	5	Iowa, Kentucky (option: General Psychology), Pennsylvania, Utah, West Virginia.
2 1/2	1	Illinois.
2	4	Missouri, New Mexico (not required for provisional certificate), Oklahoma, Wyoming.
1	6	Arizona, District of Columbia, Georgia, Michigan, North Carolina, Rhode Island.
None	30	

Educational Psychology, the second most frequently required Education subject, is specified as necessary for Elementary Teachers in 15 states and the District of Columbia. Total required credits range from 2 to 4 semester hours, with the greatest frequency occurring at 3 semester hours.

(b) Child Psychology:

Credits Required	Number of States Requiring	Specific States
6-10	1	New York (including Psychology for teachers.)
4	1	Indiana.
3 1/3	1	Washington.
3	2	Kentucky (not required for provisional certificate), Utah.
2	1	Alabama.
X	3	District of Columbia, North Carolina, Tennessee (4 credits including General Psychology).
None	40	

Eight states and the District of Columbia require credits in Child Psychology for Elementary teachers. The greatest frequency is grouped at 3 semester hours.

(c) Practice Teaching:

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
12-15	1	New York.
12 2/3	1	Washington (including Principles of Teaching).
12	2	Indiana, Utah (including Principles of Elementary Education).
8	2	Arizona (5 in Elementary schools, 3 in any school), California.
6	5	Delaware, Florida, Idaho, Kentucky (3 for provisional certificate), Virginia (option: 2 years experience)
6-12	1	Pennsylvania.
5	5	Illinois (option: 1 year experience), Iowa (3 for standard certificate), Kansas (2 for 30 hour certificate - option: 3 years experience), Michigan (options: 3 credits, Bachelor's Degree, and 3 years experience, or 3 credits and Master's Degree), West Virginia.
4	4	Colorado, Louisiana, Nevada (not required for grade 2 certificate), Oklahoma.
3 1/3	1	Oregon (or 3 years experience).
3	4	Georgia, New Mexico (2 for professional certificate), South Dakota, Vermont.
2	3	Missouri, Tennessee, Wyoming.
2	3	District of Columbia (in appropriate grades), North Carolina.
16 Weeks	1	Maine.
None	17	

Practice Teaching, the most frequently required Education subject, is specified for Elementary teachers in 31 states and the District of Columbia. Credits range from 2 to 15 semester hours, with the greatest frequencies occurring at 5 and 6 semester hours.

(d) Principles and Methods of Teaching:

Credits Required	Number of States Requiring	Specific States
20	1	Indiana (including Special Methods for: Science-4, Languages-4, Social Sciences-4, Arithmetic-4).
9	1	Delaware.
6	1	Arkansas (option: 3 plus 3 in General Psychology).
4	1	Nevada (not required for grade 2 certificate).
3	2	Kansas, Pennsylvania.
2 1/2	1	Illinois.
2	2	Alabama, Missouri.
X	6	District of Columbia, Georgia, Michigan, North Carolina, Oklahoma (2 credits including School Law and School Management), Washington.
None	35	

The third most frequently required Education subject for Elementary teachers is Principles and Methods of Teaching, required by 13 states and the District of Columbia. Range of credits vary from 2 to 20 semester hours, with the greatest frequencies occurring at 2 and 3 semester hours.

(e) Elementary School Curriculum and Techniques:

Credits Required	Number of States Requiring	Specific States
12 Quarter Hours	1	Utah.
8-12	1	New York.
6	2	New Mexico (including Reading), Tennessee.
5	1	West Virginia.
4	3	Alabama, Kentucky, Wyoming.
2	1	Oklahoma.
X	4	Arizona, Georgia, Michigan, Texas.
None	36	

Elementary School Curriculum and Techniques is the fourth most frequently required Education subject and is specified for Elementary teachers by 13 states. Credits range from 2 to 12 semester hours, with the largest frequency found at 4 semester hours.

(f) Philosophy of Education:

Credits Required	Number of States Requiring	Specific States
4	1	Indiana.
2	1	New Mexico (not required for profes- sional elementary certificate).
X	3	District of Columbia, Michigan, New York.
None	44	

Philosophy of Education is required in only four states and the District of Columbia. The maximum requirement of 4 semester hours is indicated in one state only.

(g) General Psychology:

Credits Required	Number of States Requiring	Specific States
3 1/3	1	Washington.
3	4	Arkansas (option: Principles and Methods of Teaching), Delaware, Kansas, Kentucky (option: Educational Psychology).
2	2	Alabama, New Mexico.
X	4	Arizona, Nebraska, Pennsylvania, Tennessee (4 credits including Child Psychology).
None	38	

Eleven states require General Psychology with credits varying from 2 to 3 1/3 semester hours. The greatest frequency is grouped at 3 semester hours.

(h) History of Education:

Credits Required	Number of States Requiring	Specific States
2	1	Alabama.
X	3	District of Columbia, Michigan, Rhode Island.
None	45	

History of Education is one of the least frequently specified Education subjects, required by only three states and the District of Columbia. In three of the four cases, no specified amount of credit is indicated.

(i) Introduction to Education:

Credits Required	Number of States Requiring	Specific States
4	1	Indiana.
3	1	Iowa.
2	1	New Mexico.
X	2	Georgia, New York.
None	44	

Introduction to Education is required of Elementary teachers in five states. Required credits range from 2 to 4 with no central grouping.

(j) School Law:

Credits Required	Number of States Requiring	Specific States
3	1	Utah (including Organization and Administration).
X	6	Idaho, Montana*, Nevada*, New Hampshire*, Oklahoma, Oregon.
None	42	

Seven states require a knowledge of their School Laws. Six states require no specific amount of credit. Three states, indicated with an (*) asterisk, allow the requirement to be satisfied by examination without taking a formal course in the subject.

(k) Classroom Management:

Credits Required	Number of States Requiring	Specific States
4	1	Indiana (including Principles of Teaching).
3	1	Iowa (including Classroom Methods).
2	1	Alabama (including Practice Teaching).
X	2	North Carolina, Oklahoma (2 credits including Methods and School Law).
None	44	

Although five states indicate this requirement, it cannot be analyzed as an individual subject because, as the above summary indicates, in each case it is specified in combination with one or more subjects.

(1) Educational Measurements:

Credits Required	Number of States Requiring	Specific States
4	1	Indiana.
3	1	Delaware.
2	2	Kentucky (not required for provision- al certificate), Wyoming.
X	1	Arizona.
None	44	

Five states require credit in Educational Measurements varying from 2 to 4 semester hours.

(m) Miscellaneous Requirements - Miscellaneous professional requirements are listed as follows:

State	Credits Required	Subject
Georgia	X	The School and Society.
Missouri	2	Elementary Organization.
New Hampshire	X	State Program of Studies (by examination).
New Mexico	2	Problems of New Mexico Education (for master certificate only).
Oklahoma	2	Rural School Problems.
Rhode Island	X	Art and Science of Education.
Utah	X	Principles of Elementary Education, Organization and Administration.
West Virginia	2	Organization of the West Virginia School System.

A summary of the conclusions in reference to the typical, average, exceptional, and unusual requirements specified in this chapter is presented in Chapter VIII.

CHAPTER IV

CERTIFICATION REQUIREMENTS FOR JUNIOR HIGH SCHOOL TEACHERS

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The requirements for certification of Junior High School Teachers follow a variety of patterns in the various states.

In 25 states the requirements are the same as those for High School Teachers. This pattern occurs in Alabama, Connecticut, Indiana, Georgia, Florida, Delaware, Iowa, Kentucky, Maryland, Missouri, Montana, New Jersey, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, and Wyoming.

Although specific requirements are indicated for Minnesota, Nebraska, Nevada, Oregon, South Dakota, and New Hampshire (for out-of-state applicants), the secondary certificate also serves as an alternate qualification to teach in the Junior High Schools.

In Colorado and Mississippi, the requirements are the same as for Elementary School Teachers.

In Arizona and Illinois, either the elementary or secondary certificate is qualification to teach in the Junior High Schools.

By simple variations of the above patterns, Michigan, Idaho, North Carolina, and North Dakota operate their programs of certification of Junior High School Teachers.

There are no requirements in Kansas, Massachusetts, or Washington.

The remaining states indicate specific requirements which are analyzed below.

(1) General Academic Requirements For Junior High Teachers:

<u>Preparation Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
Master's Degree	1	District of Columbia (re- quired in class 2 C schools).
Bachelor's Degree	4	California, Louisiana, Min- nesota, Nebraska (usually required for 3-4 and 6-3-3 plans and above the 8th grade in 6-6 plan).
4 Years of College	2	Rhode Island, Wisconsin.
3 Years of College	4	Maine, Nevada, New Hampshire, Oregon.
2 Years of College	1	South Dakota.
60 Semester Hours	1	Arkansas.

(2) Miscellaneous Academic Requirements:

<u>State</u>	<u>Requirements</u>
California	1 major and 1 minor, or major in Education and 2 minors.
Louisiana	12 credits in the subject taught.
Minnesota	Training in Elementary and Junior High fields.
Rhode Island	Training in Elementary and Junior High fields.
Wisconsin	Training in Junior High or Senior High field.

Arkansas is the only state making specific academic requirements.

Expressed in semester hours, these include: English - 12, Social
Studies - 12, Science - 6, and Physical Education, Health, and
Safety - 6.

Arkansas also required the following preparation, expressed in semester hours, for each subject to be taught: English - 12, Mathematics - 6 (deduction of 2 semester hours for each High School unit, not to exceed 6 semester hours, may be made), Biology - 6, General Science - 8 (minimum of 3 semester hours in each: Biological Science and Physical Science), Foreign Language - 12 (deduction of 2 semester hours for each High School unit, not to exceed 6, may be made), Social Science - 14 (including: History of Civilization - 3, American History - 3, Economics, Sociology, Government, and Geography - 8 (to be elected in 3 fields)).

(3) General Professional Requirements For Junior High Teachers:

This section refers to the total Education credits required by the various states. These are summarized as follows:

<u>Education Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
24	2	District of Columbia, Maine (12 in Junior High field).
18	2	California, Louisiana.
15	1	Nevada (10 in Junior High field).
9-15	1	Arkansas.
None	7	

(4) Specific Professional Requirements for Junior High Teachers:

The specific subjects required in Education are summarized as follows:

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
<u>(a) Educational Psychology:</u>		
4	2	California, Louisiana.
2-3	1	Arkansas.
X	1	District of Columbia.
<u>(b) Principles of Teaching:</u>		
2-4	1	Arkansas (including Methods of Teaching).
X	2	District of Columbia, Rhode Island.
<u>(c) Methods of Teaching:</u>		
X	3	Arkansas (See Principles of Teaching), District of Columbia, Rhode Island.
<u>(d) Practice Teaching:</u>		
4	1	Nevada.
3 1/3	1	Oregon (or 5 years experience).
3	1	Arkansas.
X	2	District of Columbia (or 2 years experience), Rhode Island.

(c) Miscellaneous Requirements:

<u>State</u>	<u>Credits Required</u>	<u>Subjects</u>
District of Columbia	X	Special Methods for each subject taught. Written, Oral, and Physi- cal Examination.
Nebraska	2	Physiology and Hygiene, including Narcotics and Stimulants.
Oregon	2 2/3	Oregon History, School Law, and System of Education (taken in residence).
New Hampshire	X	Junior High School Curriculum.

It is to be pointed out that this Chapter applies only to the thirteen states listing separate requirements for Junior High School teachers. It is not meant to imply that this, by any means, is a complete list of requirements for Junior High teaching, for practically every state, except Massachusetts, defines Junior High teaching requirements in some particular category. The statement at the beginning of this chapter that there are no requirements in Kansas and Washington is probably a misnomer, for both states indicate specific requirements for both Elementary and Secondary teachers. It can be reasonably assumed that either Junior High Schools do not exist in these states, or that their requirements for teachers fall into one of the other two categories.

For the requirements for Junior High School teaching in the states other than the thirteen included in this chapter, the reader is referred to the chapter dealing with the requirements for Elemen-

tary teachers or the chapter dealing with the requirements for Senior High School teachers, whichever is applicable as indicated in the first paragraphs of this chapter.

CHAPTER V

CERTIFICATION REQUIREMENTS FOR HIGH SCHOOL TEACHERS

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The contents of this chapter apply primarily to the Senior branch of the High School. However, they do have application to the Junior branch in certain states designated in the chapter dealing with the certification requirements for Junior High School teachers.

(1) General Academic Requirements:

(a) Preparation Required:

<u>Preparation Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
Master's Degree or 30 hours of graduate work	5	Arizona, California, District of Columbia, Oregon, Washington.
Bachelor's Degree or College Graduate	41	
90 Semester Hours	2	Oklahoma (Bachelor's De- gree required for life certificate), Georgia (Bachelor's De- gree required for 4 year professional cer- tificate).
No Requirements	1	Massachusetts (Bachelor's Degree required in State Aided High Schools).

In the matter of trends in the preparation of teachers, it is significant to note that 45 states and the District of Columbia require a degree without reservation, and that in 5 cases a Master's Degree, or its equivalent, is specified.

(b) Majors and Minors -- The requirements for teaching majors and minors vary considerably among the several states, with little common relationship between them. As shown in the analysis in Table V, 30 states, or the majority, do not specify their requirements for Secondary Teacher certification in terms of majors and minors.

(c) General Subject Preparation -- Fifteen states require credits in specific subjects as part of the academic requirements for the certification of High School teachers. Although specific in nature, these items are considered as general academic requirements inasmuch as they are required of all prospective High School teachers, regardless of the applicant's teaching field. These are shown in Table VI.

TABLE V

Analysis of General Academic Requirements for Certification of High School Teachers in Terms of Teaching Majors and Minors.

Majors		Minors		Number of States Requiring	Specific States	Optional Requirements			
Number	Hours Each	Number	Hours Each			Majors	Hours Each	Minors	Hours Each
						Number		Number	
0		0		30					
0		3	18	1	Utah	1	30	1	18
1	24	0		1	Texas			1	12
1	18	1	12	1	Alabama				
1	24	1	15	1	Arizona	1	(Non-High School)	2	
1		1		1	California	1	(Non-High School)	2	
1	30	1	18	1	New Jersey	1	30	2	12
1	24	1	15	2	New Mexico, South Dakota				
1	15	2	15 and 10	1	Iowa				
1	24-36	2	18	1	Kentucky	2 or 1	48-54		
1	24	2	15	2	Michigan, Montana				
1	18	2	12 and 6	1	New Hampshire				

TABLE V (CONTINUED)

				Optional Requirements			
Majors		Minors		Majors		Minors	
Number	Hours Each	Number	Hours Each	Number	Hours Each	Number	Hours Each
1	24	2	12	1	Washington		
(1	30	1	16	2/3 - Requirements for English Teachers)			
1	24	2	15	1	Wisconsin	2	24
2		0		1	Indiana		
3	16			1	Illinois	2	32 and 16
3	15			1	Ohio		
1-3	15			1	Wyoming		
2	18				Massachusetts	1	18
(Requirements apply to State Aided High Schools only)						2	9

TABLE VI

Specific Subjects Required for Certification in 15 States as Part
of the General Academic Preparation for High School Teachers.

State	English	Social Studies	Science	Physical Education	Health	Safety	Other
Alabama	12	6	6				6 (History)
Arkansas	12	12	6	(...6.....)			
Florida	6	6	6	1 Semester	1 Semester		
Illinois	6						
Kansas							40-General Cultural Courses
Kentucky				(...4.....)			
Louisiana				(...9.....)			
Mississippi	12	9	6	(...2.....)			
Missouri	X	X	X				X-Math X-Languages
(25 hours from minimum of three.....)							
Nebraska							2-Hygiene & Physiology
New Jersey	12	12	6				
Oklahoma	6 (for 1 year certificate) 8 (for life certificate)						6-American History, 2-State History, 2-Agriculture
Utah		10	20	3	3	2	10 (Language)
Washington		10					
West Virginia	8	12	6 (option: Math)				2-Speech

(2) Specific Academic Requirements for Secondary Teaching Fields.(a) English:

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
30	1	Mississippi.
25	1	Indiana.
24	6	Georgia, Maryland, Missouri, North Carolina, Tennessee, West Virginia.
18	3	Arkansas, Delaware, New York.
16	1	Oklahoma (30 for life certificate).
15	7	Connecticut, Iowa, Kansas, Nebraska, North Dakota, Ohio, Wyoming.
12	4	Florida, Kentucky, Louisiana, Virginia.
None	26	

Twenty-three states require English credits to teach that subject in the High Schools ranging from 12 to 30 semester hours. Although the greatest frequency is grouped at 15 semester hours, 12 states, as shown above, require credits in excess of 15.

Six states specify the breakdown of all or part of the total English credits required to teach that subject. These are shown in Table VII.

TABLE VII

Breakdown of English Credits as Required by Six States for Certification of High School English Teachers.

State	Total English Credits	Composition	English Literature	American Literature	Speech
Georgia	24		X	X	
Indiana	25	10	(15.....)		X-Credit Included in Composition
Mississippi	30	6	12	6	
Missouri	24	5	5	5	2 (10 for Teachers of Speech)
North Carolina	24	(incl: X Grammar)	X	X	X
Ohio	15 (3 High School units may be included)	6	(3..Prose.....) (3..Poetry.....)		

(b) Mathematics:

Credits Required	Number of States Requiring	Specific States
24	1	Indiana (Algebra-3, Geometry-6, Trigonometry-3, Calculus-6, Finance-3)
22	1	West Virginia*
18	2	Maryland*, Mississippi (Algebra and Trigonometry-6, Analytical Geometry-6, Calculus-6)
16	1	Oklahoma (24 for life certificate)
15	14	Arkansas*, Connecticut, Delaware, Florida, Georgia, Iowa, Kansas*, Missouri, Nebraska**, New York*, North Carolina, North Dakota, Ohio***, Wyoming*
12	3	Louisiana, Tennessee, Virginia
6	1	Kentucky
None	26	

In the above summary, (*) indicates that High School credits not in excess of the equivalent of 6 semester hours may be included. (**) indicates that 3 High School units may be included. (***) indicates that 2 High School units are required as a prerequisite and in addition to the college credits indicated above.

Twenty-three states require credits in Mathematics for teacher certification in that subject. Requirements range from 6 to 24 semester hours with the greatest frequency found at 15 semester hours.

(c) Social Studies:

Credits Required	Number of States Requiring	Specific States
30	3	Florida, Mississippi, New York*.
27	1	Georgia.
24	5	Delaware, Indiana, Maryland, Missouri, West Virginia.
20	1	Arkansas.
18	2	Pennsylvania, Tennessee.
16	1	Oklahoma (24 for life certificate)
15	7	Connecticut, Iowa, Kansas, Nebraska, North Dakota*, Ohio**, Wyoming.
12	3	Kentucky, Louisiana, Virginia.
None	26	

In the above summary, (*) indicates that two High School units may be offered, and (**) indicates that one High School unit may be offered as partial fulfillment of the requirements.

Twenty-three states require credits for Social Studies certification, ranging from 12 to 30 semester hours. Although the greatest frequency is found at 15 semester hours, 13 states require credits in excess of 15.

14 states specify the breakdown of all or part of the total Social Studies credits required to teach that subject. This is shown in Table VIII.

TABLE VIII

Breakdown of Social Studies Credits as Required by 14 States for Certification of High School Social

Studies Teachers.

State	Total	History	Geography	Government	Political Science	Sociology	Economics	Other
Arkansas	20	6 (Europe) 6 (U.S.)	2	2		2	2	
Connecticut	15	X (U.S.)						
Delaware	24	X						
Florida	30	9	6		X	X	X	X-Conservation of Natural Resources
Georgia	27	X	X	X		X	X	
Indiana (3 Options)	1) 36 2) 24 3) 24	10 (U.S.) 10 (General) 12 (U.S.) 12 (General)	4	4		4	4	
Iowa	15			8		8	8	
Kansas	15	(5 for each subject taught.....)		2 (American)				
Maryland	24	15					6.....or.....6	

TABLE VIII (CONTINUED)

State	Total	History	Geography	Government	Political Science				Economics	Other
					Science	Sociology	Economics	Other		
Mississippi	30	18	6		6	6	6		6	
Missouri	24	x		x		x	x		x	
Nebraska	15		x	(plus 3 in each subject taught)						
Ohio	15		3			3	3		3	
Pennsylvania	18	9		x		x	x		x	

(d) History:

Credits Required	Number of States Requiring	Specific States
24	2	Indiana (12 U.S., 12 General), North Carolina (12 American and European plus 3 in Government or Political Science).
18	1	Pennsylvania.
16	1	Oklahoma (24 for life certificate).
15	3	Connecticut, Nebraska, Ohio (3-Amer- ican, 3-World, 3-Political Science; 2 High School units may be included).
12	3	Florida (Credit in 2 other Social subjects must be included), Tennessee, Virginia.
7 1/2	1	Missouri
None	38	

Eleven states require credits in History as an individual subject. Credits range from 12 to 24 semester hours with the largest frequencies at 12 and 15 semester hours.

(e) Distributed Sciences:

Credits Required	Number of States Requiring	Specific States
40	1	Chic.
36	1	Mississippi.
30	3	New York, North Carolina, Florida.
27	1	Georgia.
24	5	Arkansas, Indiana, Maryland, Missouri, Oklahoma.
18	3	Delaware, Pennsylvania, Tennessee.
15	5	Connecticut, Iowa, Kansas, North Dakota, Wyoming.
12	1	Kentucky.
None	29	

Twenty states require credits in Distributed Sciences for certification to teach the Sciences in High Schools. Credit requirements vary from 12 to 40 semester hours, with the greatest concentration between 15 and 24 semester hours.

Twelve states require a specific breakdown of Science credits. This is shown in Table IX.

(f) Physical and Biological Sciences -- Six states make a distinction between Physical and Biological Sciences in stating their requirements. This is shown in Table X.

TABLE IX

Breakdown of Distributed Science Credits as Required by 12 States for Certification of High School Science Teachers.

State	Total	Biology	Physics	Chem- istry	Botany	Zool- ogy	Other
Arkansas	24	8	8	8			
Florida	30	(Biology may be substituted for Botany or Zoology)				X X-Geology X-Conserva- tion of Nat- ural Resour- ces	
Georgia	27	X	X (Plus a minimum of 12 in any one science)				
Indiana (4 Options)	1) 36	X	X	X		6-Geology or Physiology	
		(15 each in 2)					
	2) 25				(30.....)	5-Physiology	
	3) 20	in any one Science					
Iowa	4) 24	X	X	X			
		(...in any two...)					
	15	(5 in each subject taught.....)					
Maryland	24	6	6	6			
		(6 additional in one)					
Mississippi	36	6	6	6			
Missouri	24	5	5	5			
North Carolina	30	X	X	X		X-Geology	
North Dakota	15	(5 in each subject taught.....)					
Ohio	40		X	X	X	X X-Geology X-Astronomy	
Pennsylvania	18		3	3	3	3	

TABLE X

Distinction Between Physiological and Biological Science Credits as Indicated by Six States in Specifying the Requirements for Certification of High School Science Teachers.

State	Total Requirements		Biology	Physics	Chemistry	Botany	Zoology
	Biological Sciences	Physical Sciences					
Mississippi	24	24	12	3 12	12		
Nebraska	15.....or.....15		(3 in each subject taught.....)				
New York	18.....or.....18						
Ohio	21*	15	6	6	6	3	3
West Virginia (4 Options)	1) 24 2) 34 3) 24 4) 34	(Biology and General Science)					
Pennsylvania	18	18		6	6	6	6

(*) Indicates one High School unit may be included.

(g) Individual Sciences -- Five states specify requirements for certifying a teacher to instruct in an individual Science.

Florida requires 12 semester hours preparation to teach any single Science, or 9 semester hours in each of two Sciences. 18 semester hours, including courses in Chemistry, Physics, Botany, Zoology, and the Conservation of Natural Resources, are required to teach General Science.

Kansas requires 15 semester hours preparation for each Science taught.

Maryland specifies 6 credits in Biology, 6 in Physics, and 6 in Chemistry for teachers of General Science.

Missouri requires 15 semester hours preparation for each Science taught, and 15 semester hours, including 3 in Biology, 3 in Physics, and 3 in Chemistry, to teach General Science.

Oklahoma requires 16 semester hours in each Science taught for a 1 year certificate, and 24 semester hours in each Science taught for a life certificate.

(h) Languages -- Among the states that indicate specific teaching field requirements rather than, or in addition to, general major and minor requirements, the greatest lack of uniformity is evident in the field of foreign languages. The requirements of some states are listed by distributed credits, some by individual language credits, and some by various combinations. Any attempt to summarize the requirements by their various combinations would serve to confuse more than

clarify. Therefore, they are indicated according to the alphabetic listing of the states:

State	Distributed	Modern	Classical	Each Language Taught	Other Requirements
Arkansas	18*				
Connecticut	15				Oral & Written examination
Delaware		18			
Florida				18	12 each for 2 or more. 1st year introductory course may not be included. 6 credits above 2nd year college may be omitted in native language.
Georgia				18	
Indiana			24*		
Iowa				15	
Kansas	15				
Kentucky	6-12				
Louisiana				12	
Maryland	18				
Mississippi		24*			
Nebraska	15 (9 plus 3 High School units acceptable for minor)				
New York		18*		30*	30*-any 2 Romance languages.

State	Distributed	Modern	Classical	Each Language Taught	Other Requirements
North Carolina		24*	24*		
North Dakota				15*	
Ohio				15	Prerequisite: 2 High School units.
Oklahoma				20* (1 year certificate) 28* (life certificate)	
South Dakota*					Listed by majors and minors.
Tennessee				12	
Virginia				12	
West Virginia	24*				
Wyoming				15*	

(*) indicates that High School credit not exceeding the equivalent of 6 semester hours may be included.

(3) General Professional Requirements For Secondary Teachers --

This section refers to the total Education credits required by the various states and are summarized as follows:

Education Credits Required	Number of States Requiring	Specific States
27	1	Oregon (10 of Graduate level).
24	3	Arizona, District of Columbia, Texas (or 12 credits & 3 years experience).
20	3	Colorado, Michigan, West Virginia.
19	1	Indiana.
18	21	California (6 of Graduate level), Connecticut, Delaware, Florida (12 in residence), Georgia, Kansas, Kentucky, Maine, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Virginia, Wisconsin.
17-19	1	Ohio.
16	5	Illinois, Maryland, North Dakota, Washington, Wyoming.
16-27	1	Arkansas.
15	5	Idaho (including 6 weeks of graduate work), Iowa, Minnesota, Montana, South Dakota.
12	3	Louisiana, New Hampshire, Vermont.
12-21	1	Alabama.
10	1	Oklahoma (20 for life certificate).
600 clock hours	1	Rhode Island (800 for professional certificate).
30 quarter hours	1	Utah.
None	1	Massachusetts (12 in State aided High Schools).

It is to be noted that 47 states and the District of Columbia require credits in Education subjects for certification of High School Teachers ranging from 10 to 27 semester hours, with the greatest frequency of 21 occurring at 18 semester hours. This high percentage of states requiring Education credit is quite significant of the trend toward developing professionally qualified teachers for the secondary level.

(4) Specific Professional Requirements For Secondary Teachers --

This section refers to the specific subjects of professional preparation required of Secondary Teachers. The requirements of the various states are analyzed individually by subjects in the following summaries:

(a) Practice Teaching:

Credits Required	Number of States Requiring	State and (Equivalent Experience Acceptable in Lieu of Practice Teaching)
6	7	Connecticut, Delaware (1 year), Florida, Kentucky, Pennsylvania (3 years), Texas, Virginia (2 years).
5	6	Arizona, Illinois, Michigan (5 years), Missouri, West Virginia, Wisconsin.
5-6	1	Arkansas.
4	8	California, Colorado (3 years), Louisiana (5 years), Maryland (including Special Methods - 2 years), Nevada (2 years), New Mexico, Okla- homa (6 for life certificate), Oregon (5 years).
3	12	Alabama, Georgia, Idaho, Indiana (40 months), Iowa, Kansas, Minnesota, Mississippi, Nebraska, North Caro- lina (1 year), South Dakota, Vermont.

Credits Required	Number of States Requiring	State and (Equivalent Experience Acceptable in Lieu of Practice Teaching)
3-5	1	Ohio.
2 2/3-6	1	Washington (8 months).
2	2	Tennessee (Option: Special Methods), Wyoming.
2-6	1	New York.
400 clock hours in residence	1	Rhode Island (5 years - residence).
12 quarter hours	1	Utah.
150 clock hours	1	New Jersey (1 year).
X	1	District of Columbia (2 years).
None	6	Maine, Massachusetts, Montana, New Hampshire, North Dakota, South Carolina.

Practice Teaching, the most frequently required Education subject is required in 42 states and the District of Columbia in credits varying from 2 to 6 semester hours. Although the greatest frequency is found at 3 semester hours, 22 states indicate requirements in excess of 3 semester hours.

Fourteen states and the District of Columbia will accept teaching experience in lieu of Practice Teaching in amounts varying from 8 months to 5 years.

(b) Educational Psychology:

Credits Required	Number of States Requiring	Specific States
6	3	Indiana, Iowa, Maine (Option: General, or Applied Psychology).
5	1	West Virginia (including General Psychology).
3	9	Alabama, Kansas, Kentucky (Option: General Psychology), Maryland, Minnesota, Mississippi, New Jersey, Pennsylvania, Wisconsin.
2 1/2	1	Illinois.
2-3	2	Arkansas, Ohio (Prerequisite: General Psychology).
2-4	1	Washington.
2-9	1	New York (and/or Adolescent Psychology).
2	6	New Mexico, North Carolina, Oklahoma, Oregon, Tennessee, Wyoming.
3 quarter hours	1	Utah.
30-50 clock hours	1	Rhode Island.
X	7	Arizona, Colorado (included in optional choice of 2 out of 5), District of Columbia, Georgia, Michigan, Missouri, New Hampshire.
None	16	

Educational Psychology, the second most frequently required Education subject, is specified in 32 states and the District of Columbia in credits ranging from 2 to 6 semester hours, with the greatest frequency occurring at 3 semester hours.

(c) Principles of Secondary Education:

Credits Required	Number of States Requiring	Specific States
3	1	Texas (3 with 3 years experience).
3	3	Indiana, Iowa, New Jersey.
2	5	New Mexico, North Carolina (Option: Principles of Teaching), Oklahoma (for life certificate), Oregon, Tennessee.
2-4	1	Washington.
30-50 clock hours	1	Rhode Island.
X	8	Arizona, California, Colorado (in- cluded in option of 2 out of 5), District of Columbia, Michigan, New Hampshire (Option: School Manage- ment), New York (Option: Problems of Education), West Virginia.
None	30	

Principles of Education, or equivalent subjects, is the third most frequently required Education subject, and is specified by 18 states and the District of Columbia. Credits range from 2 to 8 semester hours, with the greatest frequency at 2 semester hours.

(d) Principles of Teaching:

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
3	6	Alabama, Indiana, Maryland, Mississippi, New Jersey, Pennsylvania.
2 1/2	1	Illinois.
2	2	North Carolina (Option: Principles of Secondary Education), Oregon.
2-3	1	Ohio.
2-4	1	Washington.
3 quarter hours	1	Utah.
X	2	Arkansas, Missouri.
None	35	

Principles of Teaching is required for certification of Secondary Teachers in 14 states in credits varying from 2 to 4, with the central tendency from 2 to 3 semester hours.

(e) General Methods:

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
5-6	1	Arkansas (including Principles of Teaching).
4	1	West Virginia.
3	3	Alabama, Iowa, Minnesota.
2	3	New Mexico, Ohio, Oklahoma (including: School Law).
2-9	1	New York (including: Special Methods).

Credits Required	Number of States Requiring	Specific States
2-4	1	Washington (Option: Principles of Teaching).
X	4	District of Columbia, Georgia, Mississippi, New Hampshire (Option: Special Methods).
None	35	

Thirteen states and the District of Columbia require courses in General Methods ranging from 2 to 6 semester hours, with the greatest number of states requiring 2 or 3 semester hours.

(f) Special Methods for Specific Teaching Field:

Credits Required	Number of States Requiring	Specific States
6	1	Tennessee (Option: 4 plus 2 credits for Practice Teaching).
4	2	Indiana, Wyoming (must include methods in 2 subjects).
3	2	Minnesota, New Jersey.
2	3	North Carolina, Oregon, Wisconsin.
2-9	1	New York (including General Methods).
1 1/3-4	1	Washington.
X	6	Colorado (one of 5 choices to fulfill 2 requirements), District of Columbia, Maryland, Michigan, Missouri, New Hampshire (Option: General Methods).
None	33	

The following Education subjects are required for certification of Secondary Teachers in less than 10 states and are summarized without comment:

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
(g) <u>History of Education:</u>		
4	1	Oklahoma (for life certificate - Option: Philosophy of Education).
3	1	Iowa (Option: Principles of Secondary Education).
2-6	1	New York (including Philosophy of Education, Principles of Education, and/or Problems of Education).
X	5	Arizona (Option: Philosophy of Education), Colorado (one of 5 options to fulfill 2 requirements), District of Columbia, Michigan (Option: Philosophy of Education), Missouri (Option: Philosophy of Education).
None	40	

(h) <u>Curriculum:</u>		
3	1	Mississippi (Option: Tests & Measurements).
X	3	Arizona, Georgia, Montana (State Curriculum).
None	45	

(i) <u>Tests and Measurements:</u>		
3	1	Mississippi (Option: Curriculum).
2	1	Oklahoma (for life certificate).
X	4	Arizona, District of Columbia, Indiana, Iowa (in combination with Educational Psychology for 6 credits).

Credits Required	Number of States Requiring	Specific States
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(j) Administration:

2-3	1	Ohio.
2	1	Kansas.
3 quarter hours	1	Utah (including Utah School Law).
X	2	Colorado, Missouri.
None	44	

(k) United States Constitution:

2	2	California (Option: by examination). Texas* (Option: 6-American Govern- ment).
X	1	Nevada*.
By Examination	3	Arizona*, Florida (Option: 6-Amer- ican History and Government), Wyoming*.
None	43	

(*) Indicates State Constitution must be included.

(l) General Psychology:

6	1	Alabama.
3	2	Kansas, Kentucky (Option: Educa- tional Psychology).
X	3	Ohio, Pennsylvania, Arizona.
None	43	

Credits Required	Number of States Requiring	Specific States
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(m) School Law:

X	7	Idaho, Montana, Nevada, Oklahoma, Utah, New Hampshire (by examination), Oregon.
None	42	

(n) State Course of Study:

2	1	New Mexico.
30-50 clock hours	1	Rhode Island.
X	3	Idaho, Washington (Option: by exam- ination), New Hampshire (by exam- ination).
None	44	

(o) Miscellaneous Requirements:

State	Credits Required	Subjects Required
Colorado	6 2/3	Philosophy, Sociology, Anthropology, Biology, and Political Science.
District of Columbia	X	Principles and Methods of Elementary, Junior High, and High School Edu- cation.
	X	Oral and written examination in major subject, minor subject, and methods of major subject.
Georgia	X	Education Orientation.
	X	School and Society.
	X	Vocational Guidance.
Idaho	X	6 weeks graduate work in residence.
Montana	X	9 weeks schooling in residence. State History and Government.

State	Credits Required	Subjects Required
New Hampshire	X	School Management.
New Jersey	3	Health Education.
New Mexico	6	Unspecified credits from a New Mexico institution by resident study, extension, or correspondence.
Oklahoma	2	Adolescent Psychology.
Oregon	2	Education Orientation.
	2	Advanced Overview of Education (Options: History of American Education, Philosophy of Education, Advanced Orientation, Recent Trends in Education).
	2 2/3	State History, School Law, and State System of Education.
Utah	3 quarter hours	Guidance and Personnel.
	3 quarter hours	Interpretation and Articulation of the Junior High School with the Elementary and Senior High Schools.
Virginia	2	School and Community Hygiene.
Washington	X	State History and Government.

(5) Requirements of the Regional Associations:

Requirement	Middle States	New England	North Central	Northwest	Southern	American Ass'n of Teachers Colleges
Degree	B	B	B	B	B	B
Credits in Teaching Field			15*	See Note ¹		24
Total Education Credits	See Note ²	12	15	15	12	
Practice Teaching			X		X	
General Methods					X	
Special Methods			X			
Educational Psychology			X		X	
History of Education			X		X	
Principles of Teaching			X		X	
Principles of Education			X			
Tests & Measurements					X	
Administration			X			
Educational Sociology			X			

(*) 6 High School credits may be included in Mathematics and Languages.

(1) Must teach in college major or minor.

(2) Professional training or successful experience.

A summary of the conclusions in reference to the typical, average, exceptional, and unusual requirements specified in this chapter is presented in Chapter VIII.

CHAPTER VI

CERTIFICATION REQUIREMENTS FOR JUNIOR COLLEGE TEACHERS

CHAPTER VI

CERTIFICATION REQUIREMENTS FOR JUNIOR COLLEGE TEACHERS

The requirements for the certification of Junior College Teachers vary considerably in pattern throughout the several states.

In Arizona, Oklahoma, and Texas, the requirements are the same as for the certification of High School Teachers. In Oklahoma, this practice is not required by law, but by the Junior Colleges themselves.

In Indiana, New Jersey, North Dakota, Ohio, Tennessee, Vermont, Washington, and Wisconsin, each institution fixes its own requirements for teacher qualification.

In 22 states, there are no requirements. These states are Arkansas, Connecticut, Delaware, District of Columbia, Florida, Idaho, Kansas, Kentucky, Maine, Montana, Nevada, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Virginia, West Virginia, Wyoming, and Massachusetts.

The remaining 16 states indicate requirements of varying degrees of specificity. These are analyzed in the following paragraphs.

(1) General Academic Requirements For Junior College Teachers:(a) Preparation:

<u>Preparation Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
Doctor's or Master's De- gree	1	California.
Master's Degree	10	Alabama, Colorado, Illinois, Iowa, Louisiana, Michigan, Nebraska, Utah, Missouri, North Carolina (for Department Head).
Bachelor's Degree plus 1 year of graduate study	4	Georgia, Maryland, Mississippi, New Hampshire, Minnesota (30 semes- ter hours graduate study for gen- eral certificate - Bachelor's De- gree for special certificate).

(2) Specific Academic Requirements For Junior College Teachers:(a) Requirements Concerning Subjects Taught:

Alabama	24 semester hours.
California	1 major and 1 minor subject.
Illinois	Must teach in college major.
Iowa	One 15 hour major and two 10 hour minors.
Michigan	Must teach in graduate major.
Minnesota	6 graduate or 24 undergraduate credits in subject taught (for general certificate). One 24 hour major or one 15 hour minor (for special certificate).
New Hampshire	Graduate work in subject taught.
Utah	Must teach in graduate major.
Missouri	24 semester hours.

(3) General Professional Requirements For Junior College Teachers:

<u>Education Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
20	1	Illinois.
18	1	Mississippi (or 1 year of college teaching).
15	2	Minnesota (15 with Master's Degree, 8 with Master's Degree plus 18 graduate credits, - not required with Doctor's Degree). Michigan.
12	1	Louisiana.
10	1	California.
X	1	Nebraska.

Seven states require credits in Education for certification to teach in the Junior Colleges. These credits range from 10 to 20 semester hours with a mean requirement of 15 semester hours.

(4) Specific Professional Requirements For Junior College Teachers:

(a) Practice Teaching -- California is the only state specifying Practice Teaching. Either 4 credits or 1 year's teaching experience is required.

(b) Teaching Experience -- Minnesota requires one year of teaching experience for certification to teach in the Junior Colleges. Georgia, Nebraska, New Hampshire, and Maryland require teaching experience or efficiency in teaching.

(c) Miscellaneous Requirements:

Alabama	Professional subjects in the teaching field.
California	Aims, Scope, and Outcomes of Secondary Education and the Junior College.
Michigan	Principles of Education, Educational Psychology, History of Philosophy of Education.
Nebraska	Courses giving a comprehensive view of the significance of the Junior College.
Missouri	Professional courses in the field taught.

CHAPTER VII

CERTIFICATION REQUIREMENTS FOR ADMINISTRATORS

CHAPTER VII

CERTIFICATION REQUIREMENTS FOR ADMINISTRATORS

This chapter dealing with the certification requirements for school Administrators considers separately under each heading the requirements for Superintendent, Elementary School Principal, and Secondary School Principal.

(1) General Requirements --

(a) Preparation:

<u>Preparation Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
<u>Superintendent:</u>		
Master's Degree	11	Arkansas, Delaware, Indiana, Iowa, Kentucky (for standard certificate), Michigan, Minnesota, Missouri, New Jersey, North Carolina, Virginia.
Bachelor's Degree plus 30 semester hours or 1 year Graduate credits	4	New York, Pennsylvania, Vermont, Maryland.
Bachelor's Degree and 10 Graduate credits	1	Oregon.
Bachelor's Degree	25	Alabama, Arizona, California, Connecticut, Florida, Georgia, Illinois, Kansas, Louisiana, Maine, Massachusetts, Mississippi, Nebraska, New Hampshire, New Mexico, North Dakota, Ohio, Rhode Island, South Carolina, South Dakota, Texas, Utah, Washington, West Virginia, Wyoming.
Not Specified	5	Colorado, District of Columbia, Montana, Nevada, Oklahoma.
No certificate required	3	Idaho, Tennessee, Wisconsin.

Preparation Required	Number of States Requiring	Specific States
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Elementary Principal:

Master's Degree	5	Kentucky (for standard certificate), Michigan, Missouri, Indiana, North Carolina.
Bachelor's Degree and 30 Graduate credits	1	Pennsylvania.
Bachelor's Degree	18	Alabama, Arizona, California, Connecticut (or Secondary certificate), Delaware, District of Columbia, Florida, Illinois, Iowa (for supervising Principal), Louisiana, Mississippi, Nebraska, New Hampshire, North Dakota, Rhode Island, South Carolina, Washington, West Virginia.
3 years of college	2	New York, Maryland.
Normal School Graduate	2	Ohio, Wyoming (2 year diploma).
Not Specified	21	

Secondary Principal:

Master's Degree	7	Delaware, Indiana, Kentucky (for standard certificate), Michigan, Missouri, North Carolina, West Virginia.
Bachelor's Degree plus 1 year or 30 credits Graduate work	3	Maryland, Pennsylvania, Vermont.
Bachelor's Degree plus 10 Graduate credits	1	Oregon.

Preparation Required	Number of States Requiring	Specific States
<u>Secondary Principal:</u>		
Bachelor's Degree	21	Alabama (for class B certificate), Arizona, California, Illinois, Iowa, Louisiana, Minnesota, Mississippi, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Ohio, Rhode Island, South Carolina, Tennessee, Virginia, Washington, Wyoming.
No certificate required	3	Idaho, Massachusetts, Wisconsin.
Not specified	14	

For the Superintendent's certificate, 41 states require a degree. While 15 states require a Master's Degree or its equivalent, the greater majority of 25 states specify a Bachelor's Degree.

For the Elementary Principal's certificate, 24 states require a degree. The greater majority of 18 require a Bachelor's Degree.

For the Secondary Principal's certificate, 32 states require a degree. Ten states specify a Master's Degree or its equivalent, and twenty-one states require a Bachelor's Degree.

(b) Teaching Certificate -- 27 states require their School Administrators to hold teaching certificates. Specifications vary as to which certificate shall be held, as shown in Table XI.

TABLE XI

Designation by 27 States of the Teaching Certificate Required to Qualify for School Administrator.

State	Superintendent		Elementary Principal		Secondary Principal	
	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary
Alabama:	Class B	X		X		X
	Class C	X..or....X				
Arizona	X..or....X		X...or..X		X...or..X	
California		X	X			X
Colorado		X		X		X
Connecticut				X		X
				or		
				Bachelor's Degree		
Georgia	X..or....X					
Indiana	X..or....X		X			X
Iowa			X			X
Maine			X			X
Michigan		X	X			X
Minnesota	X..or....X		X...or..X			
Montana		X		X		X
Nevada			X			X

TABLE XI (CONTINUED)

Designation by 27 States of the Teaching Certificate Required
to Qualify for School Administrator.

State	Superintendent		Elementary Principal		Secondary Principal	
	Elemen- tary	Second- ary	Elemen- tary	Second- ary	Elemen- tary	Second- ary
New Mexico	X...or...X				X...or...X	
North Carolina	X...or...X		X			X
Ohio		(X)		(X)		(X)
Oklahoma		(X)		(X)		(X)
Oregon		X	X..or...X			X
Rhode Island			X			X
South Dakota		X				
Tennessee			X			X
Utah	X...or...X					
Virginia						X
Washington		X	X			X
West Virginia		(X)	X			X
Wisconsin		(X)				
Wyoming			X			

In the above table, (X) indicates that the type of certificate
is not specified.

(c) Teaching Experience Required:

<u>Years Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
<u>Superintendent:</u>		
6	2	Pennsylvania (including 3 years as Principal), Rhode Island (or 3 years as superintendent, or 1 year as superintendent and 4 years as teacher, or 2 years as superintendent and 2 years as teacher).
5	9	Arkansas (or 3 years administrative) Connecticut (including 2 years in administration), Indiana (or 5 administrative, Louisiana, Montana (3 for 2nd class district), New York (or 5 administrative), North Carolina, Vermont (including administrative experience), West Virginia (or 5 administrative).
3	2	Alabama (or 5 administrative - for class B certificate), Arizona, Delaware (or 3 administrative), Georgia, Maine, New Mexico (2 in residence or 3 years and 30 Graduate credits), Ohio, South Dakota (Secondary), Utah.
4	2	Iowa, New Hampshire (plus 1 administrative, or total 5 administrative).
2	6	California, Florida (or 2 administrative), Kansas (or 2 administrative), Kentucky, Maryland, Michigan (or 2 administrative), Minnesota (1 elementary and 1 secondary plus 2 administrative), Mississippi.
1	1	Wyoming.

Years Required	Number of States Requiring	Specific States
<u>Elementary Principal:</u>		
6	1	Pennsylvania.
5	1	Louisiana (for 1-B certificate). (3 for 1-C certificate).
4	1	Iowa (for supervising Principal, 2 for teaching Principal).
3	9	Alabama (or 3 administrative - for class B certificate, 0 for class C certificate), Arizona, Connecticut (Elementary), District of Columbia (Elementary), Indiana (or 3 admin- istrative), Maryland, Montana (for 2nd class district, 0 for 1st class district), North Carolina, Ohio.
2	7	Florida (or 2 administrative), Kentucky, New York (or 2 adminis- trative), Washington (Elementary or Junior High), Michigan (or 2 administrative), Minnesota, Mississippi.
1	2	Delaware (Elementary), Wyoming.
<u>Secondary Principal:</u>		
6	1	Pennsylvania.
4	1	Iowa (for supervising Principal, 2 for teaching Principal).
3	10	Alabama (or 3 administrative - for class B certificate, 0 for class C certificate), Arizona, Connecti- cut (High or Junior High), Indiana (or 3 administrative), Louisiana, Minnesota (1 or 2 in small schools), Montana (for 2nd class district, 0 for 1st class district), New Mexico (2 in residence or 3 with 30 Graduate credits), North Caro- lina, New York (with 6 Graduate credits, or 2 years administrative and 6 Graduate credits).

<u>Years Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
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Secondary Principal:

2	12	California, Delaware, Florida (or 2 administrative), Kentucky, Maryland, Michigan (or 2 administrative), Mississippi, Vermont, Virginia, Washington (Secondary), West Virginia (or 2 administrative), New York (with 6 Graduate credits, or 2 years administrative and 6 Graduate credits).
1	2	South Dakota (Secondary), Wyoming.

(d) Administrative Experience Required:Superintendent:

12	1	Texas (or 12 Education credits).
8	1	Massachusetts.
5	3	Minnesota, New Hampshire (or 1 and 4 teaching), New Jersey (as Principal, or 3 in district employing 20 or more teachers).
4	1	Washington (2 Elementary Principal plus 2 Secondary Principal, or 2 Elementary Principal, 8 Education credits, and 1 year teaching, or 2 High School Principal, 1 teaching, and 16 Education credits).
3	3	Pennsylvania (Principal), Virginia (Principal), Rhode Island (3 as Superintendent and 6 teaching, or 2 Superintendent & 2 teaching, or 1 Superintendent & 4 teaching).
2	2	North Dakota, Connecticut.
X	1	Vermont.

Years Required	Number of States Requiring	Specific States
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Elementary Principal:

8	1	District of Columbia.
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Secondary Principal:

No administrative experience is required in any state as a qualification for a Secondary Principal, except as an option to teaching experience as noted in the preceding section.

(2) Specific Requirements For Administrators --

(a) Education Credits -- In this section no attempt is made to point out the central tendency of requirements because in some cases the figure represents Graduate credits, and in other cases, undergraduate credits. The states designating their requirements in Graduate credits are indicated by an (*) asterisk.

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
<u>Superintendent:</u>		
14 quarter hours	1	Utah.
30	2	Connecticut*, Pennsylvania*.
27	1	Georgia.
24	4	California*, Florida, Kentucky, Vermont*.
20	3	Iowa*, New York*, Wyoming.
18	6	Maine, Massachusetts, Mississippi, Nebraska, New Hampshire, Ohio*.
16	2	Minnesota*, North Dakota*.
15	2	Arizona*, Virginia*.
12	3	North Carolina*, West Virginia*, Texas (or 18 years administrative experience).
10	1	Montana*.
8	1	Kansas*.
6	2	Michigan*, South Dakota*.
200 clock hours	1	Rhode Island.

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
<u>Elementary Principal:</u>		
40	1	District of Columbia.
30	1	Pennsylvania*.
28	1	New York.
24	2	Florida, Kentucky.
18	7	California*, Delaware, Louisiana, Mississippi, Nebraska, New Hamp- shire, Ohio*.
15	2	Arizona*, Connecticut* (for super- vising Principal, 6 for teaching Principal).
10	1	Montana*.
8	1	Washington*.
6	4	Iowa*, Michigan*, Minnesota*, North Carolina*.
4	1	Wyoming*.
<u>Secondary Principal:</u>		
30	2	Minnesota*, Pennsylvania*.
24	3	Florida, Kentucky, New York.
20	1	Wyoming.
18	6	Delaware, Mississippi, Nebraska, New Hampshire, Ohio*, Vermont*.
15	2	Arizona*, Connecticut* (for super- vising Principal, 6 for teaching Principal).
12	2	Louisiana, California*.

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
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Secondary Principal:

10	1	Montana*
8	1	Washington*.
6	3	Iowa*, Michigan*, North Carolina*.

(b) Administration:Superintendent:

30	1	Pennsylvania (including Supervision).
12	3	North Carolina (including Supervision), Texas (or 18 years experience in Administration), West Virginia (including Supervision).
9	1	Georgia.
8	1	New York (including Supervision and Organization).
6	2	Minnesota (4 for small High Schools), Iowa (3 General Administration, and 3 Secondary Administration and Organization).
4-8	1	South Dakota (2-4 Elementary Administration and Supervision, plus 2-4 Secondary Administration and Supervision).
2	1	Arizona (including Supervision).
X	16	California (Secondary, City, and State), Delaware (S), Florida (E & S), Illinois, Kansas (E & S), Kentucky (E & S), Maine, Maryland, Massachusetts, Mississippi, Montana, Nebraska, Rhode Island (including State), Utah (E & S), Vermont, Virginia.

Credits Required	Number of States Requiring	Specific States
<u>Elementary Principal:</u>		
30	1	Pennsylvania ((E) plus Supervision).
6	2	New Hampshire (S), North Carolina ((E) plus Supervision).
4	1	New York ((E) plus Supervision and Organization).
3	1	Delaware.
2	1	Arizona (including Supervision).
2 courses	1	District of Columbia.
X	12	California ((E) and City School), Connecticut (for supervising Prin- cipal only), Indiana (E), Iowa (E), Kentucky (E & S), Maryland (E), Min- nesota (E), Mississippi, Missouri (E), Montana, Nebraska, Washington (E).
<u>Secondary Principal:</u>		
30	1	Pennsylvania ((S) and Supervision).
6	3	New Hampshire (S), New York ((S) plus Supervision and Organization). North Carolina ((S) and Supervision).
4	1	Delaware.
2	1	Arizona (including Supervision).
X	13	California (S and City School), Connecticut, Florida (S), Indiana (S), Iowa (S), Kentucky (E & S), Mary- land (S), Mississippi, Missouri (S), Montana, Nebraska, Vermont (S), Washington (S).

In the above summaries of Administration, (E) is used to indicate that the state concerned specifies Administration of the Elementary Schools, (S) to indicate Administration of the Secondary Schools, and (E & S) where both are indicated.

(c) Supervision -- This section considers Supervision as a separate requirement and not in combination with Administration.

Credits Required	Number of States Requiring	Specific States
<u>Superintendent:</u>		
12	1	Connecticut (for Assistant Superintendent only).
8	1	Minnesota (4 Elementary plus Elementary Curriculum, 4 Secondary plus Secondary Curriculum).
6	1	New Hampshire.
3	1	Iowa (E).
X	16	California (S), Delaware, Florida (E & S), Indiana, Kansas (E & S), Kentucky (E & S), Maine, Maryland, Massachusetts, Mississippi, Missouri (E & S), Montana, Nebraska, Rhode Island, Utah (E & S), Vermont (E).
<u>Elementary Principal:</u>		
6	1	Connecticut (E) (for teaching Principal, X for supervising Principal).
3	1	Delaware (E).
2 courses	1	District of Columbia (E).
X	12	California (E), Florida (E), Indiana (E), Iowa (E), Kentucky (E & S), Maryland (E), Minnesota (E), Mississippi, Missouri (E), Montana, Nebraska, Washington (E).

Credits Required	Number of States Requiring	Specific States
<u>Secondary Principal:</u>		
6	1	Connecticut (S) (for teaching Principal, X for supervising Principal).
3	1	Delaware.
2	1	Minnesota (S) (for standard High School, X for small High School).
X	12	California (S), Florida (S), Indiana (S), Iowa (S), Kentucky (E & S), Maryland (S), Mississippi, Missouri (S), Montana, Nebraska, Vermont (S), Washington (E).

(d) Organization -- This section considers Organization as a separate requirement and not in combination with either Administration or Supervision.

Credits Required	Number of States Requiring	Specific States
<u>Superintendent:</u>		
2	1	Arizona (including E or S Curriculum).
X	2	Kansas (E & S), Massachusetts.
<u>Elementary Principal:</u>		
2	1	Arizona (including E or S Curriculum).
2 courses	1	District of Columbia (E).
X	1	Washington (E).

<u>Credits Required</u>	<u>Number of States Requiring</u>	<u>Specific States</u>
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Secondary Principal:

2	1	Arizona (including M or S Curriculum).
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X	2	Connecticut (S) for supervising Principal), Washington (S).
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(e) Methods:Superintendent:

6	1	Texas (or 18 years administrative experience).
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X	5	Delaware (E & S), Maine, Maryland, Massachusetts (E & S), Vermont (E & S).
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Elementary Principal:

8	1	New York (E).
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X	1	Maryland (E).
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Secondary Principal:

X	2	Delaware (E), Maryland (S).
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(f) Curriculum:Superintendent:

X	5	Arizona (E & S) (See "Organization"), California (E & S), Connecticut (E & S), Minnesota (See "Organization"), Vermont.
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Elementary Principal:

X	4	Arizona (E or S) (See "Organization"), California (E), Connecticut (E) (for supervising Principal), Missouri (E).
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Credits Required	Number of States Requiring	Specific States
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Secondary Principal:

X

5

Arizona (E or S) (See "Organiza-
tion"), California (S), Missouri (S),
Vermont (S), Minnesota (E) (one of
4 options to fulfill 3 require-
ments for 2 credits).

Because of their less frequent occurrence, the following requirements are presented in tabular form according to the alphabetical listing of the states:

State	Credits Required		
	Superintendent	Elementary Principal	Secondary Principal
(g) <u>School Law:</u>			
California	X		
Maine	X		
Massachusetts	X		
(h) <u>Statistics:</u>			
Arizona	2 (Option: Tests and Measurements)	2	2
Vermont	X		
(i) <u>Finance:</u>			
California	X		
Connecticut	X		
Kansas	X		
Virginia	X		
Massachusetts	X		
(j) <u>Business Administration:</u>			
California	X		
Kansas	X		
(k) <u>Tests and Measurements:</u>			
Arizona	2 (Option: Statistics.....)	2	2
California	X	X	X

State	Superintendent	Credits Required	
		Elementary Principal	Secondary Principal

(k) Tests and Measurements: (Continued)

Connecticut	X		
Delaware		3	3
Minnesota (One of 4 options to fill 3 requirements)			X

(l) Philosophy of Education:

Arizona	2 (including History of Education)	2	2
California		1	
New York (including History and Principles of Education)		4	
Vermont	X (Option: Principles of Education.....)		X

(m) History of Education:

Arizona	X	X	X
Maine	X		
Massachusetts	X		
New York		X	
Vermont	X		

(n) Principles of Education:

New York		X	
Vermont	X (Option: Philosophy of Education)		X

State	Superintendent	Credits Required	
		Elementary Principal	Secondary Principal

(e) Practice Teaching:

Louisiana		4	4
Nebraska	3	3	3

(p) General Psychology:

California		X	
Delaware		3	3

(q) Educational Psychology:

Maine	X		
Massachusetts	X		
Minnesota	(1 of 4 options to fill 3 requirements).....X		
New York		6	
		(including Mental Hygiene)	
Vermont	X		X

(r) Sociology:

California		X	
Massachusetts	X		

(s) Miscellaneous Requirements:

State	Credits Required			Requirement Required
	Superin- tendent	Elementary Principal	Secondary Principal	
Connecticut	X			School Buildings.
Minnesota			X	Guidance (1 of 4 options to fill 3 requirements).
Missouri			X	Extra Curricular Activities.
Nebraska	2	2	2	Physiology and Hy- giene including Nar- cotics & Stimulants.
New Hampshire	6			Elementary Education.
New York		X		Mental Hygiene.
North Dakota	12 4			General Education. Elementary Education.
Rhode Island		X	X	30 clock hours in duties of position.
Utah	X			3 quarter hours in division not covered by certificate.
	X			Interpretation and Articulation of Jun- ior High School with Elementary and Senior High Schools.
	X			A major interest not directly connected with regular work in Education.
Vermont			X	Guidance.
	X			Psychology of com- mon school branch.
	X			Rural Education.
	X			Rural-Urban Society.

A summary of the conclusions in reference to the typical, average, exceptional, and unusual requirements specified in this chapter is presented in Chapter VIII.

CHAPTER VIII

RESTATEMENT OF PROBLEM AND CONCLUSIONS

CHAPTER VIII

RESTATEMENT OF THE PROBLEM AND CONCLUSIONS

(1) Statement of the Problem -- The problem is to determine the average, exceptional, and unusual requirements for the certification of public school teachers and administrators in the several states of this country.

The purpose of this study is twofold:

(a) To provide a practical reference for prospective public school teachers and administrators to guide their selection of courses of study.

(b) To provide a reference to enable a comparison of attained qualifications with required standards.

(2) Definitions --

(a) Typical Requirements -- "Typical requirements", as expressed in this study is intended to mean the specific requirements common to at least half of the states.

(b) Average Requirements -- "Average requirements" is understood to mean the central tendency of the number of states specifying each particular requirement, and includes the inter-quartile range, as closely as can be expressed in whole credits, of the number of states indicating the particular item. Unless a requirement is common to ten or more states, it has not been considered representative, and therefore has been disregarded.

(c) Exceptional Requirements -- "Exceptional requirements" is interpreted to mean exceptionally high standards as com-

pared to the central tendencies.

(d) Unusual Requirements -- "Unusual requirements" is meant to apply to the unique specifications exclusive to one or two states.

(3) Conclusions for Elementary Teachers --

(a) Typical Requirements -- Forty-seven states and the District of Columbia specify one or more requirements for general academic preparation. Twenty-five states require the equivalent of three or four years of college. Eighteen of this number specify a Bachelor's degree or four years of college training.

In general professional preparation, thirty states and the District of Columbia require credits in Education ranging from six to forty semester hours. The greatest single frequency of five occurs at eighteen semester hours.

The only specific professional requirements that can be classified as typical is Practice Teaching. This item is specified by thirty-one states and the District of Columbia in credits ranging from two to fifteen semester hours. The greatest frequencies of five each are found at five and six semester hours.

(b) Average Requirements -- The average requirements for the certification of Elementary Teachers are shown in Table XII.

TABLE XII

The Average Requirements for the Certification of Elementary

Teachers:

Academic Requirements	Average Credits Required	Professional Requirements	Average Credits Required
General Preparation	Bachelor's Degree	Education	16-24
English	6-12	Educational Psychology	3
Arithmetic	2-3	Practice Teaching	5-6
Sciences	4-8	Principles and Methods of Teaching	2-3
Social Studies	6-10	Elementary School Curriculum	4-6
History	6	General Psychology	3
Geography	3-6		
Music	2-4		
Arts	2-4		
Health	2		
Physical Education			

(c) Exceptional Requirements -- Exceptional requirements in the Elementary division include the following: Indiana requires 24 English credits of all Elementary teachers. Alabama requires 12 History credits which is twice as many as any other state. The District of Columbia requires 40 Education credits. New York specifies 36 Education credits, 12-15 of which will be in Practice Teaching. Indiana requires a total of 20 credits in General and Special Methods of Teaching.

(c) Unusual Requirements -- Unusual requirements in the Elementary field include the following: Indiana requires 4 credits in Drama as part of the English requirements. Michigan requires 4 minors of 15 hours each, or 1 major and 2 minors of 24 and 15 hours, respectively. In Kansas, each Elementary teacher must present 2 credits in Playground Activities. North Carolina includes Proficiency in Spelling and Penmanship. Montana requires 9 weeks of resident study. Utah demands a major interest other than teaching. Oklahoma requires a course in Rural School Problems.

(4) Conclusions for Secondary Teachers --

(a) Typical Requirements -- In general academic preparation, forty-one states require a Bachelor's degree or its equivalent.

In general professional preparation, forty-seven states and the District of Columbia require credits in Education ranging from ten to twenty-seven semester hours, with the greatest single frequency of twenty-one occurring at eighteen semester hours.

Two specific professional requirements appear typical. Practice Teaching is required in forty-two states and the District of Columbia in credits ranging from two to six semester hours. Although the greatest frequency of twelve is found at three semester hours, twenty-two states indicate requirements in excess of three semester hours.

Educational Psychology is specified in thirty-two states and the District of Columbia in credits varying from two to six semester hours, with the greatest single frequency of nine occurring at three semester hours.

(b) Average Requirements -- The average requirements for the certification of Secondary teachers is shown in Table XIII.

TABLE XIII

The Average Requirements for the Certification of
Secondary School Teachers

<u>Academic Requirements</u>	<u>Average Credits Required</u>	<u>Professional Requirements</u>	<u>Average Credits Required</u>
General Preparation	Bachelor's Degree	Education	15-18
English	6-12	Practice Teaching	3-5
Mathematics	15	Educational Psychology	2-3
Social Studies	15-24	Principles of Secondary Education	2
History	12-16	Principles of Teaching	2-3
Distributed Sciences	15-24	General Methods	2-3
Languages (in each language taught)	15-18	Special Methods	2-3

(c) Exceptional Requirements -- Exceptional requirements in the Secondary field include the following: Indiana indicates 24 credits to teach Mathematics or History. West Virginia requires 22 Mathematics credits. Florida and Mississippi require 30 credits and Georgia 27 credits of teachers of the Social Studies. Ohio requires 40 credits and Mississippi 36 credits to teach Distributed Sciences. Oregon tops the list of required Education credits with 27 semester hours.

(d) Unusual Requirements -- Under this heading in the Secondary field, the following are included: Idaho requires 6 weeks, and Montana 9 weeks of resident study. Georgia specifies a course in Vocational Guidance. Utah requires 3 credits in a course entitled, "The Interpretation and Articulation of Junior High Schools with the Elementary and Senior High Schools." The District of Columbia includes as one of its standards an oral and written examination in the major subject, minor subject, and methods of the major subject.

(5) Conclusions Junior High Teachers and Junior College Teachers -- Too few states indicate specific requirements for Junior High and Junior College Teachers to arrive at any definite conclusions as defined by Paragraph (2) of this chapter.

(6) Conclusions for Administrators --

(a) Typical Requirements -- In general requirements, 41 states require a degree for a superintendent's certificate. Of this number, 26 specify a Bachelor's degree, while 15 require a Master's

degree or its equivalent.

24 states require a degree for the Elementary Principal's certificate. Of this number, 18 require a Bachelor's degree, and 6 require a Master's degree or its equivalent.

For the Secondary Principal's certificate, 32 states require a degree. 22 states specify a Bachelor's degree, and 10 require a Master's degree or its equivalent.

27 states require all school administrators to hold teaching certificates.

24 states require teaching experience, varying from 1 to 6 years, for eligibility for the superintendent's certificate.

26 states require teaching experience, varying from 1 to 6 years, for eligibility for the Secondary Principal's certificate. Of this number of states, 22 require 2 or 3 years experience.

In professional requirements, 29 states require credits in Education of their Superintendents, varying from 6 to 30 semester hours, with the mean requirements of 18 semester hours indicated by 7 states.

26 states require credits in Administration, varying from 2 to 30 semester hours, for eligibility for a superintendency.

(b) Average Requirements -- The average requirements for the certification of Administrators are shown in Table XIV.

TABLE XIV

The Average Requirements for the Certification of Administrators.

Requirements	Average Credits Required		
	Superintendent	Elementary Principal	Secondary Principal
General Preparation	Bachelor's Degree	Bachelor's Degree	Bachelor's Degree
Teaching Certificate Required	Secondary	Elementary	Secondary
Teaching Experience	2-5 years	2-3 years	2-3 years
Administrative Experience	3-5 years	.	.
Education Credits	15-24	15-24	12-20
Administration	X	X	X
Supervision	X	X	X

(c) Exceptional Requirements -- Exceptional requirements in the field of Administration include the following: Connecticut and Pennsylvania require 30 graduate credits in Education of their Superintendents. Minnesota and Pennsylvania require 30 graduate credits in Education of a Secondary Principal. The District of Columbia indicates 40 credits in Education for an Elementary Principal. Pennsylvania specifies 30 credits in Administration and Supervision for Administrators at all levels.

(d) Unusual Requirements -- The unusual requirements in Administration include the following: Vermont is the only state requiring Statistics, without option, as a requirement for a Superintendency. California and Kansas require their Superintendents to offer credit in Business Administration. Nebraska requires 2 credits of all Administrators for a course in Physiology and Hygiene, including the effects of stimulants and narcotics. Minnesota is the only state specifying credit in Extra-Curricular Activities for Secondary Principals.

(7) General Conclusions -- As evidenced by this and preceding chapters, it is apparent that, even though central trends are noticeable, there is still a wide variation in the amount of, and kind of training required in the various states for the certification of teachers and administrators.

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